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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,513	11/13/2000	Siegfried Schustek	1326	8193

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EXAMINER
PANG, ROGER L

ART UNIT	PAPER NUMBER
3681	

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7-15-02

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/647,513	Applicant(s) SCHUSTEK ET AL.
	Examiner Roger L Pang	Art Unit 3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 May 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *2,8-10,17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7 and 11-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The following action is in response to communications filed for application 09/647,513 on May 31, 2002.

Election/Restrictions

Claims 2, 8-10, and 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

PCT Rule 13 states that multiple embodiments may be examined if there is unity of invention. It was shown, however, with the cited Takashima reference, that all the common features from the different species were already known in the art, thereby lacking unity. Since there is a lack of unity, an election/restriction requirement was proper. Applicant's arguments have been considered, but are not persuasive.

Specification

The abstract of the disclosure is objected to because the reference to the drawing figure should be removed. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3-7, 11-14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takaoka'683. With regard to claim 1, Takaoka teaches a drive arrangement for at least one auxiliary system of a motor vehicle, having an internal combustion engine 150, at least on supplementary motor MG1, and a gear 120, characterized in that the gear is a planetary gear, which is operatively connected to the engine and the at least one supplementary motor, each via a respective input shaft 125,156 and to the auxiliary system via an output shaft 126. With regard to claim 3, Takaoka teaches the arrangement, characterized in that the supplementary motor is an electric machine (MG1). With regard to claim 4, Takaoka teaches the arrangement, characterized in that the electric machine is a starter generator of the internal combustion engine (MG1). With regard to claim 5, Takaoka teaches the arrangement, characterized in that a control unit 170/180 is assigned to the drive arrangement and detects an rpm Nr of the output shaft and governs the supplementary motor as a function of the rpm (Fig. 10). With regard to claim 6, Takaoka teaches the arrangement, characterized in that the control unit includes a sensor 149, which measures the rpm of the output shaft. With regard to claim 7, Takaoka teaches the arrangement, characterized in that a sun wheel 121 of the planetary gear is connected in a manner fixed against rotation to the input shaft of the supplementary motor, and a carrier 124 for at least one planet wheel 123 is connected to the input shaft of the engine. With regard to claim

11, Takaoka teaches the arrangement, characterized in that a relatively small electric machine is used, which at a moderate power requirement makes a wide governing range possible (Fig. 2). With regard to claim 12, Takaoka teaches the arrangement, characterized in that the planetary gear, the electric machine, and the output shaft are components of a vehicle transmission (Fig. 2). With regard to claim 13, Takaoka teaches a method for operating a drive arrangement for at least one auxiliary system of a motor vehicle, having an internal combustion engine 150, at least one supplementary motor MG1 and a gear 120, characterized in that the gear is a planetary gear with at least two input shafts 125,156 and at least one output shaft 126, and a torque is transmitted from the engine and the at least one supplementary motor via a respective one of the input shafts, to the output shaft and subsequently to the auxiliary system MG2; and a control unit 170/180 is assigned to the drive arrangement and detects an rpm Nr of the output shaft and governs the supplementary motor as a function of the rpm (Fig. 10). With regard to claim 14, Takaoka teaches the method, characterized in that a set-point value or a set-point range for the rpm of the output shaft is specified to the control unit. With regard to claim 16, Takaoka teaches the method, characterized in that the torque of the supplementary motor is increased if a power requirement to the engine is made as a consequence of a starting or acceleration event of the motor vehicle (Col. 17, lines 31-44).

Claims 1, 3-6, 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Takashima'472. With regard to claim 1, Takashima teaches a drive arrangement for at least one auxiliary system of a motor vehicle, having an internal combustion engine 1, at least on supplementary motor 3, and a gear 7, characterized in that the gear is a planetary gear, which is operatively connected to the engine and the at least one supplementary motor, each via a

respective input shaft 1a,3a and to the auxiliary system via an output shaft 5a. With regard to claim 3, Takashima teaches the arrangement, characterized in that the supplementary motor is an electric machine (MG5). With regard to claim 4, Takashima teaches the arrangement, characterized in that the electric machine is a starter generator of the internal combustion engine (Col.7, lines 29-31). With regard to claim 5, Takashima teaches the arrangement, characterized in that a control unit is assigned to the drive arrangement and detects an rpm S110 of the output shaft and governs the supplementary motor as a function of the rpm S150. With regard to claim 6, Takashima teaches the arrangement, characterized in that the control unit includes a sensor, which measures the rpm of the output shaft (Col. 5, lines 53-56). With regard to claim 11, Takashima teaches the arrangement, characterized in that a relatively small electric machine is used, which at a moderate power requirement makes a wide governing range possible (Fig. 1). With regard to claim 12, Takashima teaches the arrangement, characterized in that the planetary gear, the electric machine, and the output shaft are components of a vehicle transmission (Fig. 1). With regard to claim 13, Takashima teaches a method for operating a drive arrangement for at least one auxiliary system of a motor vehicle, having an internal combustion engine 1, at least one supplementary motor 3 and a gear 7, characterized in that the gear is a planetary gear with at least two input shafts 1a,3a and at least one output shaft 5a, and a torque is transmitted from the engine and the at least one supplementary motor via a respective one of the input shafts, to the output shaft and subsequently to the auxiliary system; and a control unit 19/17 is assigned to the drive arrangement and detects an rpm S110 of the output shaft and governs the supplementary motor as a function of the rpm (S150). With regard to claim 14, Takashima teaches the method, characterized in that a set-point value or a set-point range for the rpm (i.e. 20 km/h)of the output

shaft is specified to the control unit. With regard to claim 15, Takashima teaches the method, characterized in that the supplementary motor is an electric machine M/G 3, which can also be operated as a generator or electric brake, and if the result of the torque transmitted by the engine is an rpm that is above the set-point value (i.e. 20 km/h) or set-point range for the rpm of the output shaft, the electric machine is operated as a generator. With regard to claim 16, Takashima teaches the method, characterized in that the torque of the supplementary motor is increased if a power requirement to the engine is made as a consequence of a starting or acceleration event of the motor vehicle (Col. 7, lines 29-31).

Claims 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuzuki '061. With regard to claim 13, Tsuzuki teaches a method for operating a drive arrangement for at least one auxiliary system of a motor vehicle, having an internal combustion engine 1, at least one supplementary motor 5 and a gear 2, characterized in that the gear is a planetary gear with at least two input shafts 21,22 and at least one output shaft 26, and a torque is transmitted from the engine and the at least one supplementary motor via a respective one of the input shafts, to the output shaft and subsequently to the auxiliary system ; and a control unit 10 is assigned to the drive arrangement and detects an rpm Nc of the output shaft and governs the supplementary motor as a function of the rpm (S29). With regard to claim 14, Tsuzuki teaches the method, characterized in that a set-point value Vss or a set-point range for the rpm of the output shaft is specified to the control unit. With regard to claim 15, Tsuzuki teaches the method, characterized in that the supplementary motor is an electric machine, which can also be operated as a generator or electric brake, and if the result of the torque transmitted by the engine is an rpm Vs that is

above the set-point value Vss or set-point range for the rpm of the output shaft, the electric machine is operated as a generator.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hanyu, Kato, Moore, Wilkinson, Schmidt '842, Yamaguchi, Kanai, Morisawa, Nakae, and Bader have been cited to show similar drive arrangements.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone numbers for the

organization where this application or proceeding is assigned are 705-305-3597 for regular communications and 705-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

RLP
July 11, 2002

Roger Pang